

Q1 Referring to FIG. 4, the oxide layer 108 is polished subsequently by the chemical mechanical polishing and the polishing is stopped until the underlying silicon nitride layer 104 is about exposed. Thereafter, the silicon nitride layer 104 is stripped by the wet bench and by the high selectivity of the hot phosphoric acid (H_3PO_4) used in the wet bench. Then, the thermal oxide layer 102 is removed by the wet etching while using the hydrofluoric acid (HF) as the etching solution, so that the shallow trench isolation structure 110 as shown in FIG. 5 is formed.

Please amend the paragraph beginning on line 20, page 7, and carrying over onto page 8, as follows:

Q2 Referring to FIG. 9, the oxide layer 208 is etched by the wet etching until the silicon nitride layer 204 above the edge of the shallow trench 206 is about exposed, and the selectivity between the silicon nitride and oxide of the wet etching is high so that the end point of the etching can be controlled. Because the edge of the shallow trench 206 is exposed, so the oxide layer 208 in the shallow trench 206 is separated from the oxide layer 208 on the silicon nitride layer 204 outside the shallow trench 206. In a preferred embodiment of the present invention, after the wet etching process is completed, the silicon nitride layer 210 is deposited, for example, by the chemical vapor deposition to cover the entire surface of the oxide layer 208, the shallow trench 206, and the exposed silicon nitride layer 204 above the edge of the shallow trench 206, and the structure as shown in FIG. 10 is

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Amend.

formed. The oxide layer 208 outside the shallow trench 206 is sandwiched in between the silicon nitride layer 204 and the silicon nitride layer 210. However, it is worthy noted that the silicon nitride layer 210 is not necessary to be formed while the wet etching process is completed in the present invention. The purpose of forming the silicon nitride layer 210 is just to better control the thickness of the shallow trench isolation structure 214.

Please amend the paragraph beginning on line 19, page 8, and carrying over onto page 9, as follows:

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Referring to FIG. 13, after the dry etching process, the photoresist 212 is stripped by using the wet strip or the dry strip so that the silicon nitride layer 210 is exposed. Subsequently, the silicon nitride layer 204 and the silicon nitride layer 210 are stripped by hot phosphoric acid in a wet bench, and the temperature of the hot phosphoric acid is between about 150°C and 200°C. Since the oxide layer 208 outside the shallow trench 206 is sandwiched in between the silicon nitride layer 204 and the silicon nitride layer 210 and is only contacted with the silicon nitride layer 204 and the silicon nitride layer 210, so the oxide layer 208 is also stripped while the silicon nitride layer 204 and the silicon nitride layer 210 are stripped in the wet bench. And the thermal oxide layer 202 is removed by the wet etching while using the hydrofluoric acid as the etching solution, so that the completed shallow trench isolation structure 214 is formed, as shown in FIG.
